

DaimlerChrysler AG

Patent claims

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1. A method for checking the data integrity of flashware in electronic control devices having at least one microprocessor (CPU), at least one flash memory (Flash), at least one boot sector, at least one buffer and at least one interface for downloading the flashware, characterized in that, in order to check the data integrity, the flashware is loaded into a buffer and in that at least two checksums are calculated for the flashware in the buffer, specifically a cyclic block protection method for checking for transmission errors and a hash value calculation for checking the authenticity of the flashware.

2. The method as claimed in claim 1, characterized in that a cyclic block protection method (CRC), authentication by means of a message authentication code and a hash value calculation are carried out for the flashware in the buffer.

3. The method as claimed in claim 1, characterized in that a cyclic block protection method, signature checking and a hash value calculation are carried out for the software in the buffer.

4. The method as claimed in claim 3, characterized in that the signature checking is carried out with a public key method.

5. The method as claimed in one of claims 1 to 5, characterized in that after the block protection method the security class of the software to be checked is interrogated.